

Work Order ID 76386

November-11-11 12:41:49 PM

76386

U/R

Page 1

Item ID: D3391-021

Accept

N900040100

Setup

Start

NS1

Revision ID:

Item Name: Fwd Tube Assembly

Stop

NS2

Start Date: 11/11/2011 Start Qty: 1.00

1

Cust Item ID:

Required Date: 25/11/2011 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan:

Date: 11/11/14

Tooling:

Date:

Run

Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3391	Rev H U/R	OK 11/11/14							
100	Skidtubes	0.00							
100	Memo	0.00							
Skidtubes	Cut extrusion to 46.52 +0.010 -0.020								
110		0.00							
110	BENDING MACHINE - SKIDTUBES	0.00							
CNC Bend 1	Memo	0.00							
CNC Delta 100 Bender	Bend as per Dwg D3391 Using Bend Prog 3391021								
120	QC5- Inspect part completeness to step on W/O	0.00							
120	Memo	0.00							
QC									
Quality Control									

DP 11-11-15

DP 11-11-15

1 Ø 11-11-15

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 76386

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Item ID: D3391-021

Accept

N900040100

Se

■p Start

NS1

Revision ID:

Item Name: Fwd Tube Assembly

Start Date: 11/11/2011 **Start Qty:** 1.00

1

Cust Item ID:

Required Date: 25/11/2011 **Req'd Qty:** 1.00

1

Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

RU

Start

NR1

90

Date:

SPC (Y/N)

Date:

NR1
NP2

W/O:		WORK ORDER CHANGES							
DATE	STEP	PROCEDURE CHANGE			By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Work Order ID 76386

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Item ID: D3391-021

Accept

N900040100

Setup Start

NS1

Revision ID:

Item Name: Fwd Tube Assembly

Stop

NS2

Start Date: 11/11/2011 **Start Qty:** 1.00

1

Cust Item ID:

Required Date: 25/11/2011 **Req'd Qty:** 1.00

1

Customer:

Reference:

Approvals: Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start

NR1

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

NR2

**Sequence ID/
Work Center ID**

**Operation
Description**

**Set Up/
Run Hours**

Tool ID

Tool #

**Plan
Code**

**Accept
Qty**

**Reject
Qty**

**Reject
Number**

**Insp.
Stamp**

160

QC2- Inspect parts off machine FAI/FAIB

0.00

160

QC

Quality Control

SC/ak 11/11/22 1 0

170

QC8- Inspect parts - second check

0.00

170

QC

Quality Control

SL 11-11-22

W/O:		WORK ORDER CHANGES							
DATE	STEP	PROCEDURE CHANGE			By	Date	Qty	Approval Chief Eng / Prod Mgr.	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 76386

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Start Date: 11/11/2011 Start Qty: 1.00

1

Cust Item ID:

Required Date: 25/11/2011 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run

Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

180

180

Skidtubes

Skidtubes

Memo

0.00

1-Drill float bag holes as per Dwg D3391 using DT8798(Do not open tow cap holes to finish size)
(ONLY DRILL HOLES MARKED "A")

2-Drill Remaining two holes for tow cap using DT 8819 Locating off of .1875"
holes drilled in previous step

3-Open tow cap holes to .208" as per Dwg D3391

4-Open Tow Ring hole to .640" as per Dwg D3391

5- open float bag holes 0.328" and counter sink as per dwg D3391

6-Deburr & Scribe Batch number Inside aft end.

7-Transfer drill D3391-021 with D3391-023

DP 11-12-1

11-11-22

190

QC5- Inspect part completeness to step on W/O

0.00

190

QC

Quality Control

0.00

11-11-30 (1)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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Work Order ID 76386

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Item ID: D3391-021

Accept

N900040100

Setup

Start

NS1

Revision ID:

Item Name: Fwd Tube Assembly

Stop

NS2

Start Date: 11/11/2011 Start Qty: 1.00

1

Cust Item ID:

Required Date: 25/11/2011 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run

Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

200

Chemical Conversion Coat per QSI005 4.1

0.00

200

HandFinish

Memo

0.00

(D) 6 SAJ 11/12-01

Hand Finishing

210

QC3- Inspect Part Finish

0.00

210

QC

Memo

0.00

Quality Control

DP 11-12-1

220

Skidtubes

0.00

220

Skidtubes

Memo

0.00

Skidtubes

1-instal spacers as per dwg D3391
A/R Magnabond 6398 batch: 117870
exp. date: 02/12
cure time 12hrs. as per QSI015
2- grind crossbolt flush
3-back drill crossbolt if necessary

DL 11/12/02

W/O:		WORK ORDER CHANGES							
DATE	STEP	PROCEDURE CHANGE			By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Item ID: D3391-021

Accept

N900040100

Setup Start

NS1

Revision ID:

Item Name: Fwd Tube Assembly

Stop

NS2

Start Date: 11/11/2011 **Start Qty:** 1.00

1

Cust Item ID:

Required Date: 25/11/2011 **Req'd Qty:** 1.00

1

Customer:

Reference:

Approvals: **Process Plan:** _____

Date: _____

Tooling: _____

Date: _____

Run Start

NR1

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

NR2

**Sequence ID/
Work Center ID**

**Operation
Description**

**Set Up/
Run Hours**

Tool ID

Tool #

**Plan
Code**

**Accept
Qty**

**Reject
Qty**

**Reject
Number**

**Insp.
Stamp**

230

QC5- Inspect part completeness to step on W/O

0.00

S w12105

230

QC

Quality Control

235

Pressure Wash per QSI005 4.3

0.00

235

HandFinish

Hand Finishing

Memo

0.00

240

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00

240

Powdercoat

Powder Coating

Memo

10:20 0.00
START TIME: _____
OVEN TEMPERATURE: 320°F
FINISH TIME: _____

10:50

W118434

XJM-11/12/06

1 BL 11/12/6

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 76386***76386***

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Item ID: D3391-021

Accept

N900040100

Setup

Start

NS1

Revision ID:

Item Name: Fwd Tube Assembly

Stop

NS2

Start Date: 11/11/2011 Start Qty: 1.00

1

Cust Item ID:

Required Date: 25/11/2011 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run

Start

NR1

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
250 *250* QC	QC3- Inspect Part Finish	0.00							1 6 11/12/09
Quality Control	Memo	0.00							
255 *255* Skidtubes	Skidtubes	0.00							1 6 11/12/09
Skidtubes	Memo	0.00							
	**** install D3591-1 spacer as per DSI9364 and wearplate and gasket as per DWG ****								
257 *257* QC	QC5- Inspect part completeness to step on W/O	0.00	8	wlalog					
Quality Control	Memo	0.00							

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 76386

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76386

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Item ID: D3391-021

Accept

N900040100

Setup

Start

NS1

Revision ID:

Item Name: Fwd Tube Assembly

Stop

NS2

Start Date: 11/11/2011 Start Qty: 1.00

1

Cust Item ID:

Required Date: 25/11/2011 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run

Start

NR1

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

NR2Sequence ID/
Work Center IDOperation
Description

260

Identify as per dwg & Stock Location: w10***260***

Packaging

Packaging

Set Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

0.00

D412-742-043 / 1376400

1

d

ll 11/12/08

280

QC21- Final Inspection - Work Order Release

0.00

280

QC

Quality Control

Memo

0.00

11/12/08

cME
11-12-09

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Page 1

November-11-11 12:41:53 PM

Work Order ID: 76386

76386

Parent Item: D3391-021

D3391-021

Parent Item Name: Fwd Tube Assembly

Start Date: 11/11/2011

Required Date: 25/11/2011

Start Qty: 1.00

Required Qty: 1.00

Comments:

IPP A05.09.13New issue KJ/JLM
 IPP B06.02.10Dwg rev.D ecn 773 EC
 IPP C06.05.02Added inspections EC
 IPP D 07.03.13 rev F dwg EC
 IPP E 07.11.07 revG dwg ecn1053P EC verified by: DD
 IPP Rev:f ECN 1056 07-11-12 DD verified by: EC
 IPP Rev:G 08-09-08 new process (ecn 08-510) DD verified by:EC
 IPP Rev:H 08-09-10 revH as per dwg DD verified by:EC
 IPP Rev J 09.02.02 added hardware EC verified by: DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D6013-047		Manufactured	No			100	Each	8.0000	1	1		11-11-15	**

D6013-047

Skidtube Material

Location

LG

26547

Loc Qty

8

8

Loc Code

1

4

D3670-4-200

Manufactured

No

220

Each

104.0000

**

D3670-4-200

SPACER

Location

LG

71850

Loc Qty

12

12

Loc Code

1

4

D3401-041

Manufactured

No

255

Each

1.0000

1

1

**

D3401-041

Tow Cap Assembly

Location

FP007

Loc Qty

1

71352

1

1

1

11/12/02

B71878 (x1) 11.12.08

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Page 2

November-11-11 12:41:53 PM

Work Order ID: 76386

76386

Parent Item: D3391-021

D3391-021

Parent Item Name: Fwd Tube Assembly

Start Date: 11/11/2011

Required Date: 25/11/2011

Start Qty: 1.00

Required Qty: 1.00

D3564-13

Manufactured No

255

Each

17.0000

1

1

**

1376220 (x1) M 11/12/08

Wearshoe

D3564-13

D4095-051

M 11/12/08

Location Loc Qty Loc Code

FP001 16

73323 16

FP017 1

71594 1

D3566-13

Manufactured No

255

Each

30.0000

1

1

**

N/A

Gasket

N/A M 11/12/08

Location Loc Qty Loc Code

FP 29

73322 29

FP014 1

68341 1

AN960C10L

NAS1149C0332

Purchased

No

255

Each

0.0000

10

10

**

M 11/12/08 (x10) M 11/12/08

washer

*AN960C10L *

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries

Picklist Print

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Work Order ID: 76386

76386
D3391-021

Parent Item: D3391-021

Parent Item Name: Fwd Tube Assembly

Start Date: 11/11/2011

Required Date: 25/11/2011

Start Qty: 1.00

Required Qty: 1.00

AN3C4A

Purchased

No

255

Each

2,163.000

10

10

**

M 1112108

AN3C4A

BOLT

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST350	2163	
117313	2	
117688	5	
117872	22	
118112	16	
118451	2	
118706	142	
118838	974	
<u>119328</u>	1000	
		X10

D3672-1

Manufactured

No

255

Each

688.0000

4

4

**

M 1112108

D3672-1

Phenolic Washer

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP-A	424	
52505	0	
<u>66821</u>	424	X11
ST074	264	
72229	264	

AEIS-1032-130

Purchased

No

255

Each

0.0000

2

2

**

(X2) M 1112108

AFIS-1032-130

AEIS-1032-130

INSERT

AEIS-1032-225

Purchased

No

255

Each

0.0000

10

10

**

M 1112108 (X10) M 1112108

AFIS-1032-225

INSERT

W/O:		WORK ORDER CHANGES							
DATE	STEP	PROCEDURE CHANGE			By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

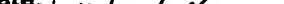
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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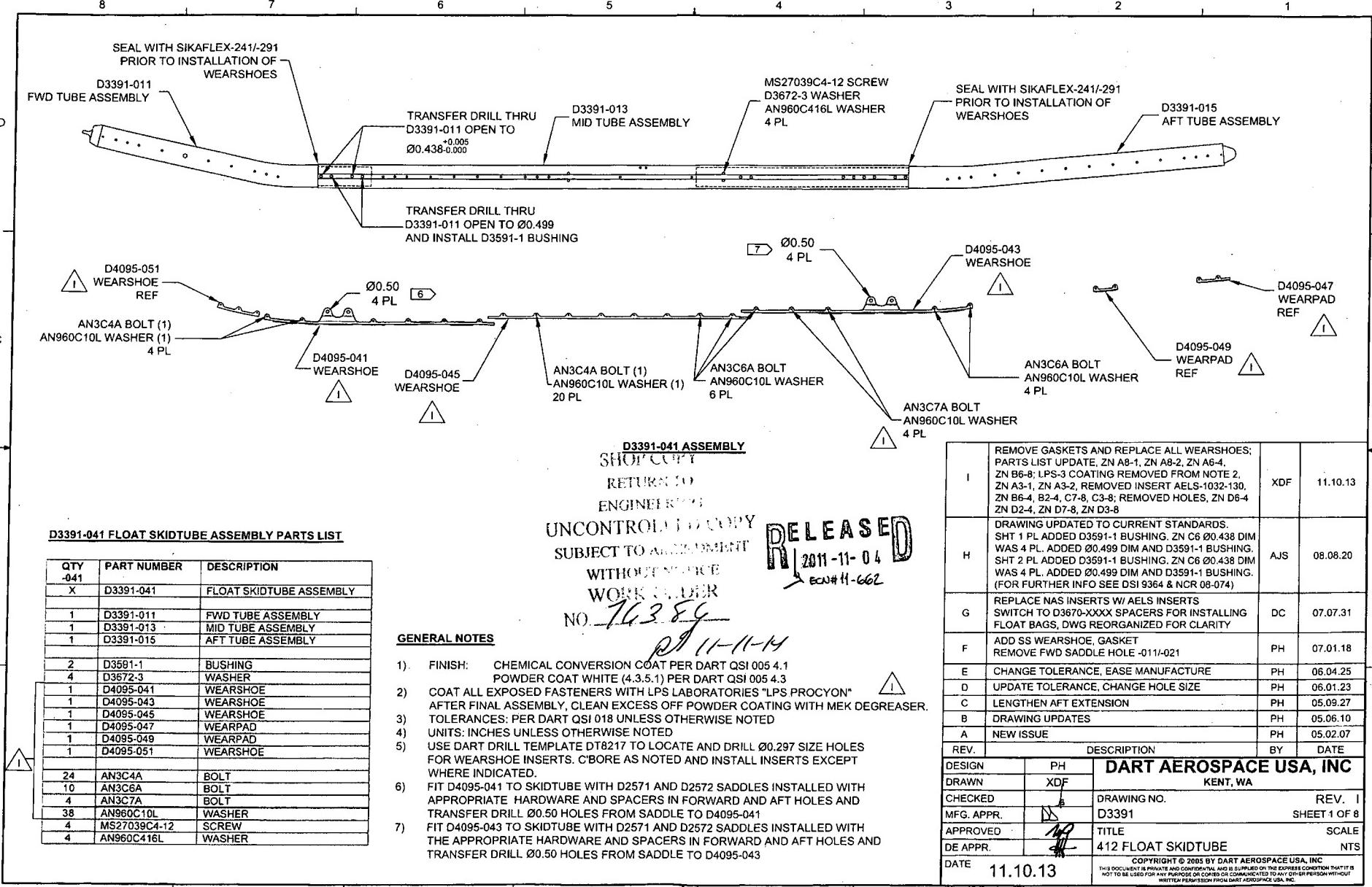
DART AEROSPACE LTD	Work Order:	
Description: Float tube Assy.	Part Number:	3391-021
Inspection Dwg: 3371 Rev: I		Page 1 of 1

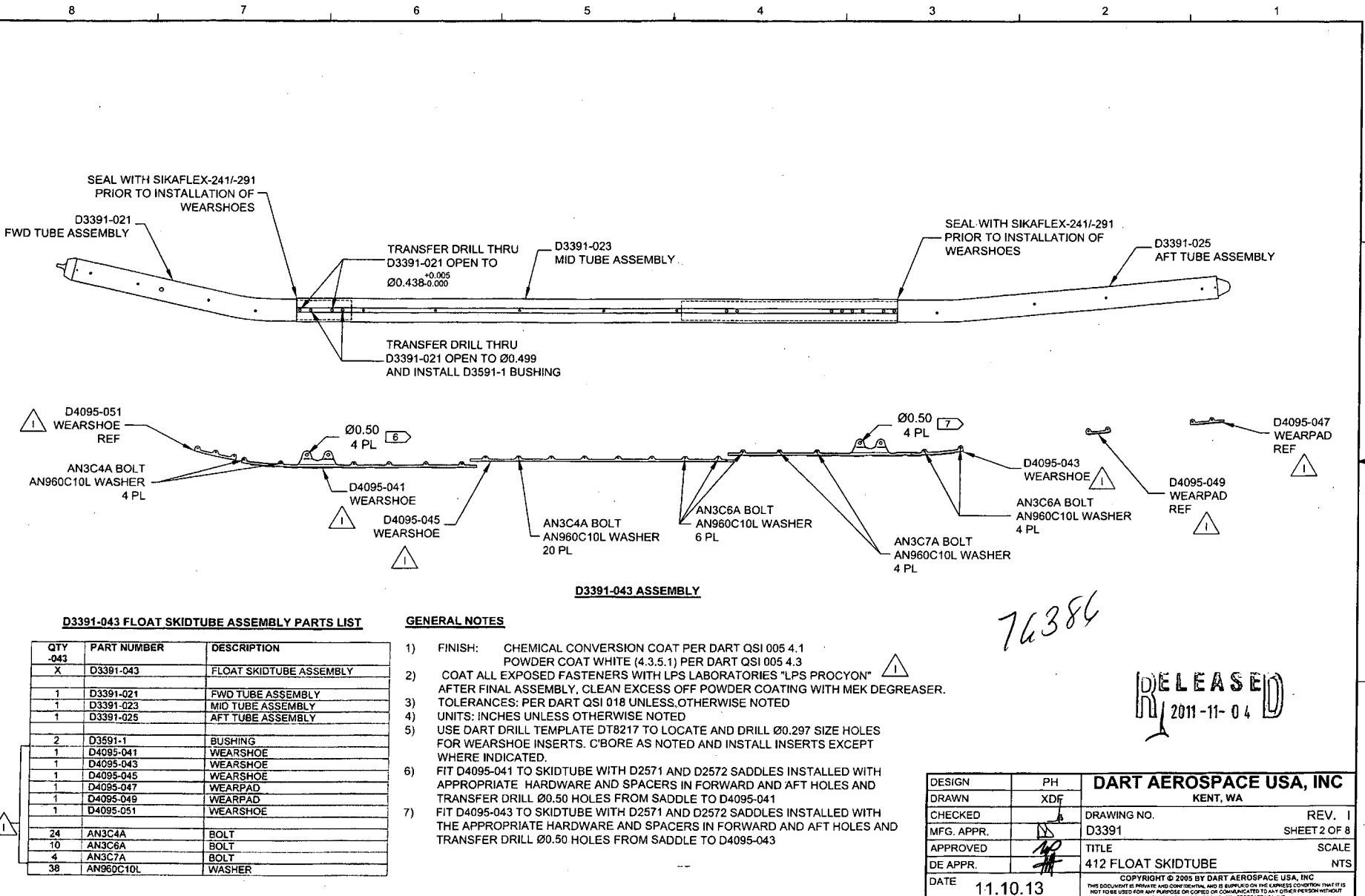
FIRST ARTICLE INSPECTION CHECKLIST

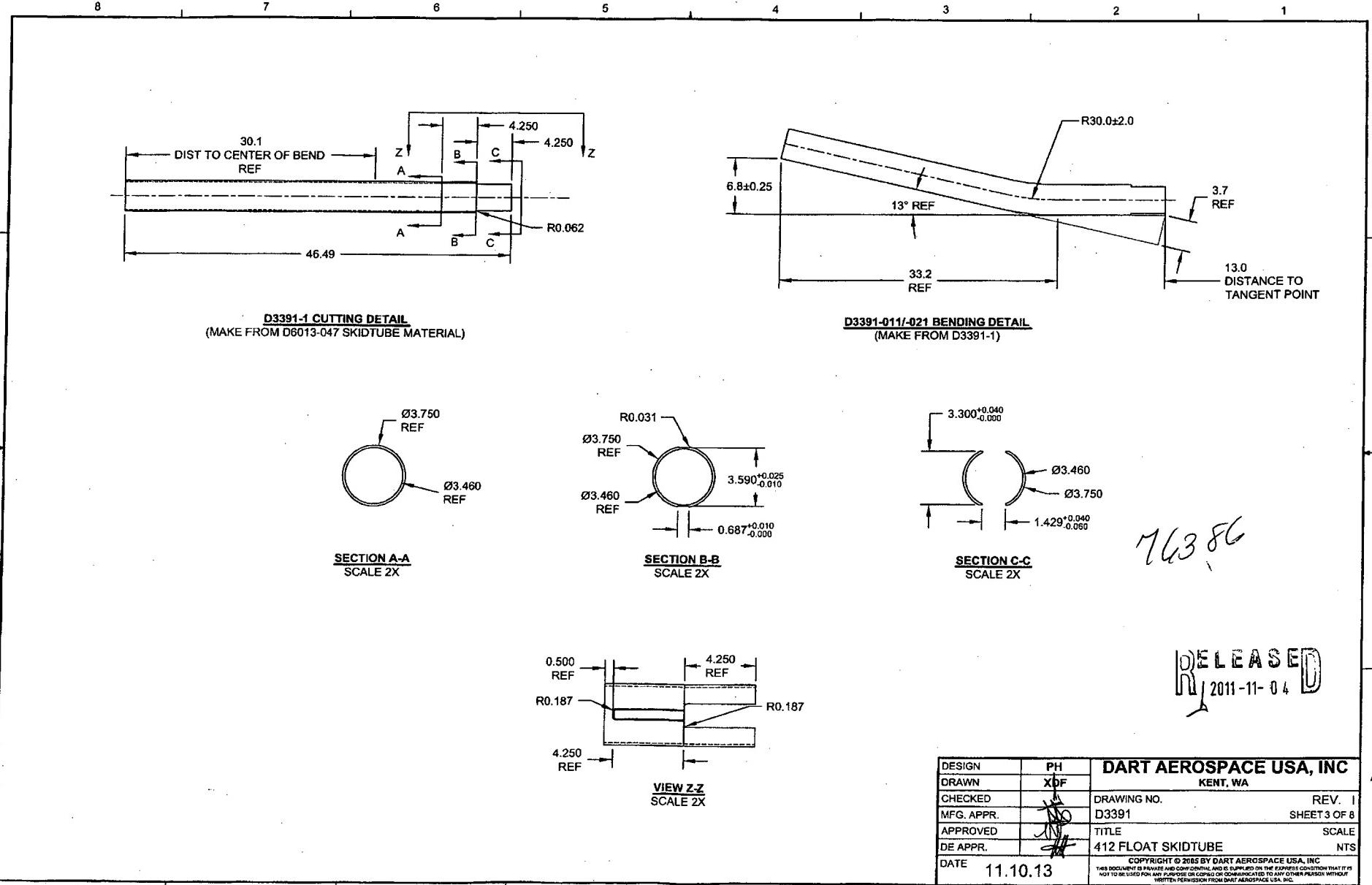
Measured by: 	Audited by: 	Preliminary Approval:
Date: 11/11/18	Date: 11-11-22	Date:

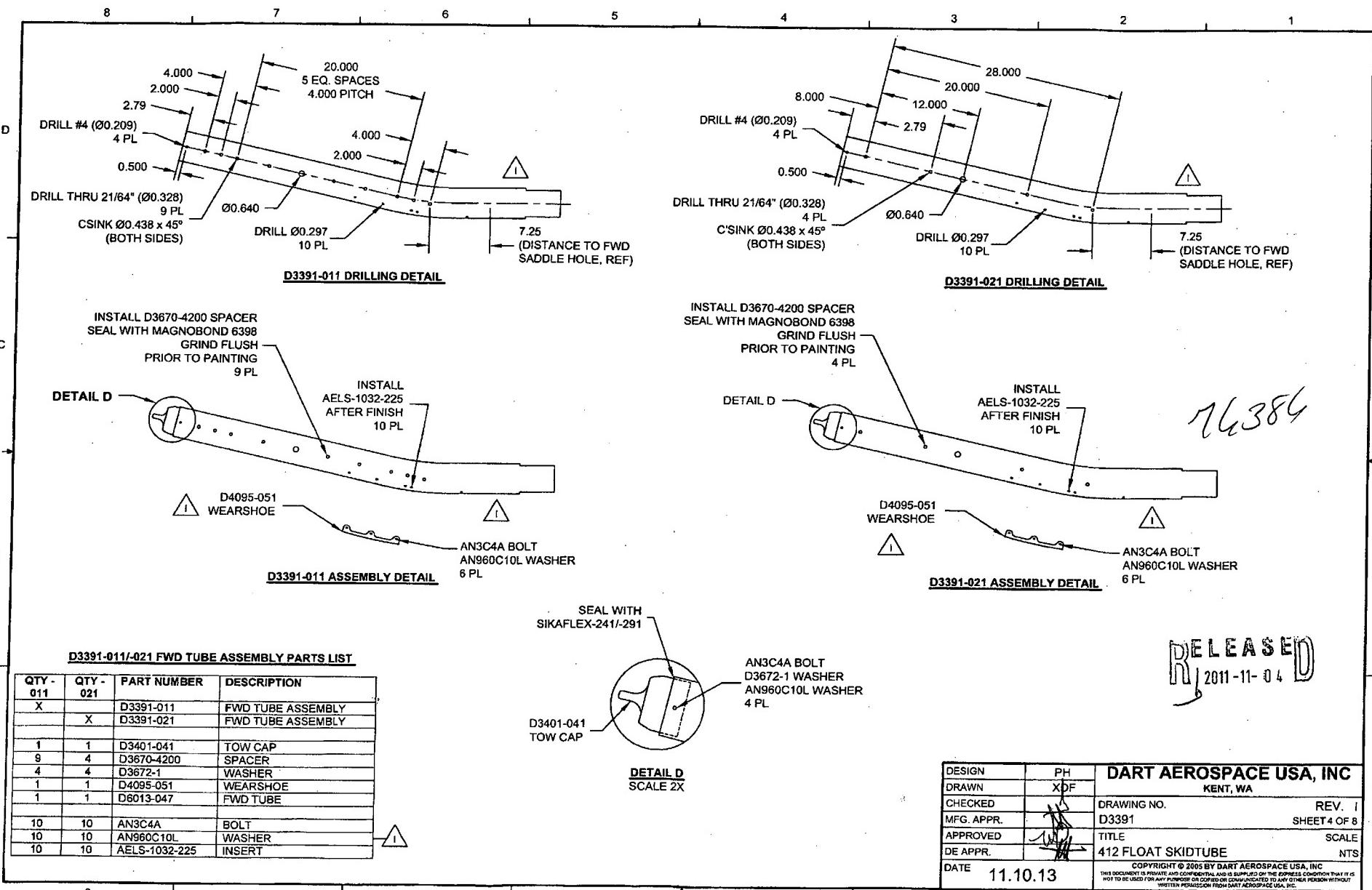
Rev	Date	Change	Revised by	Approved
E	10.04.14	Added preliminary approval	KJ	

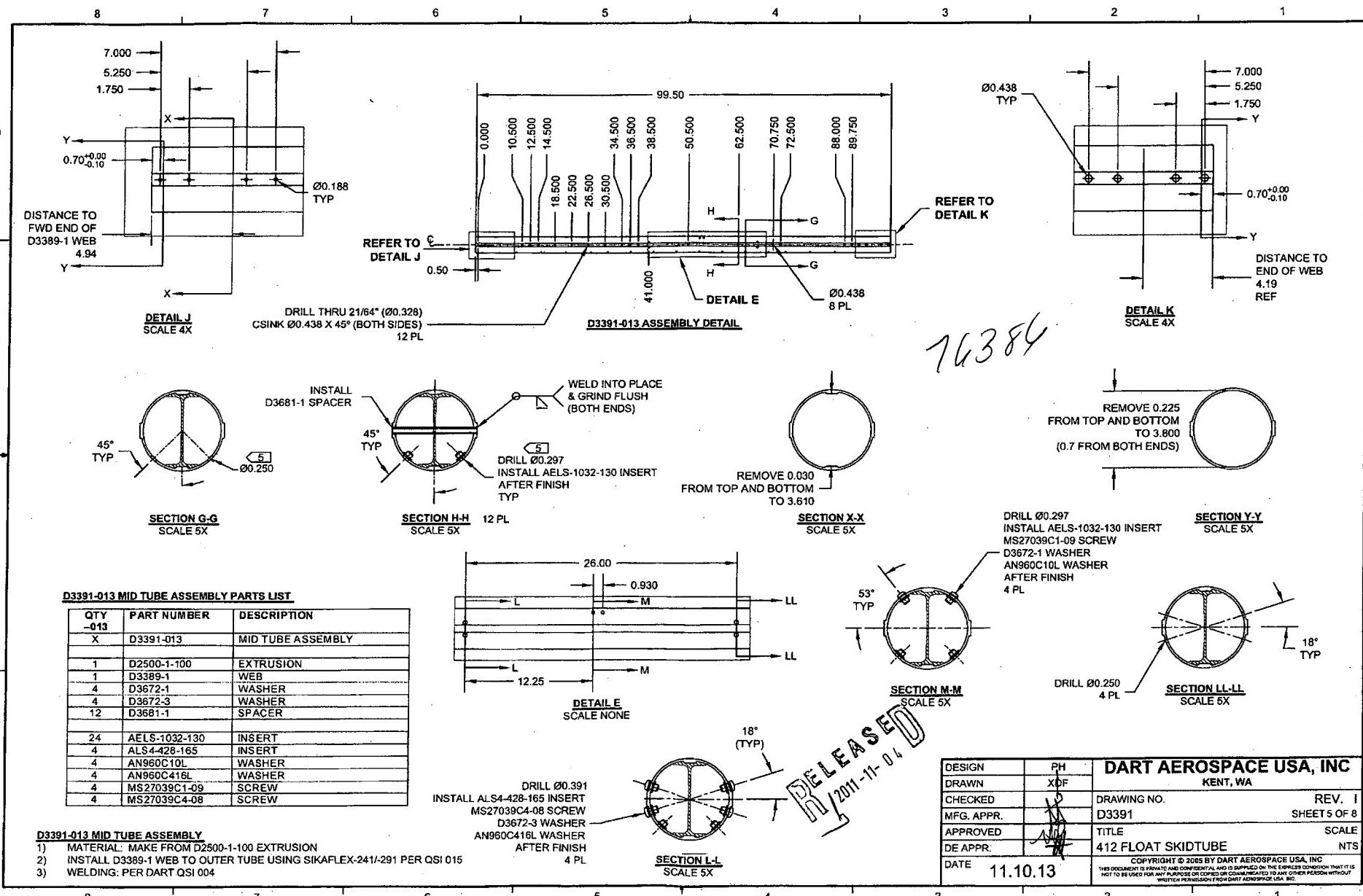
10.04.15



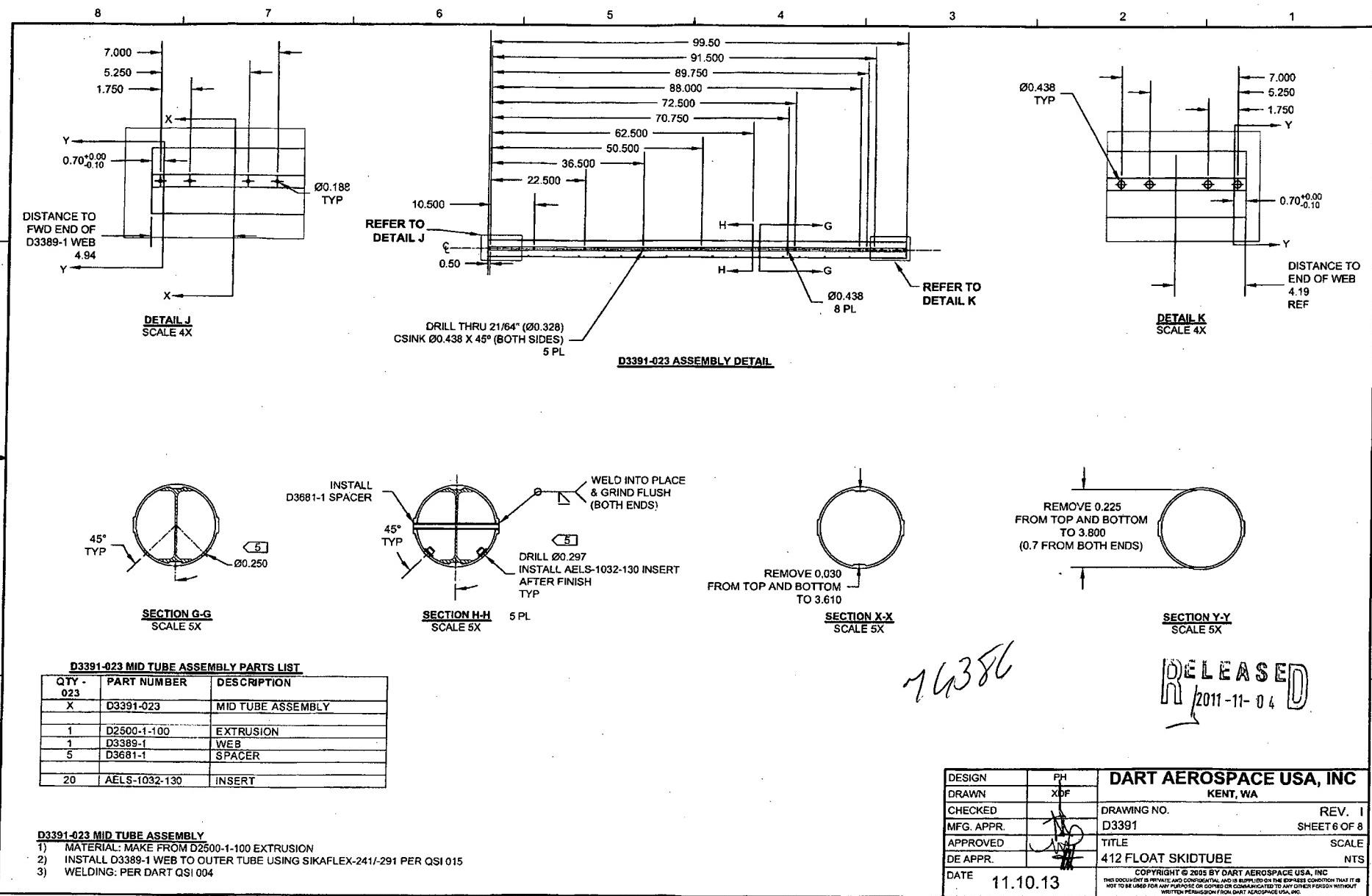


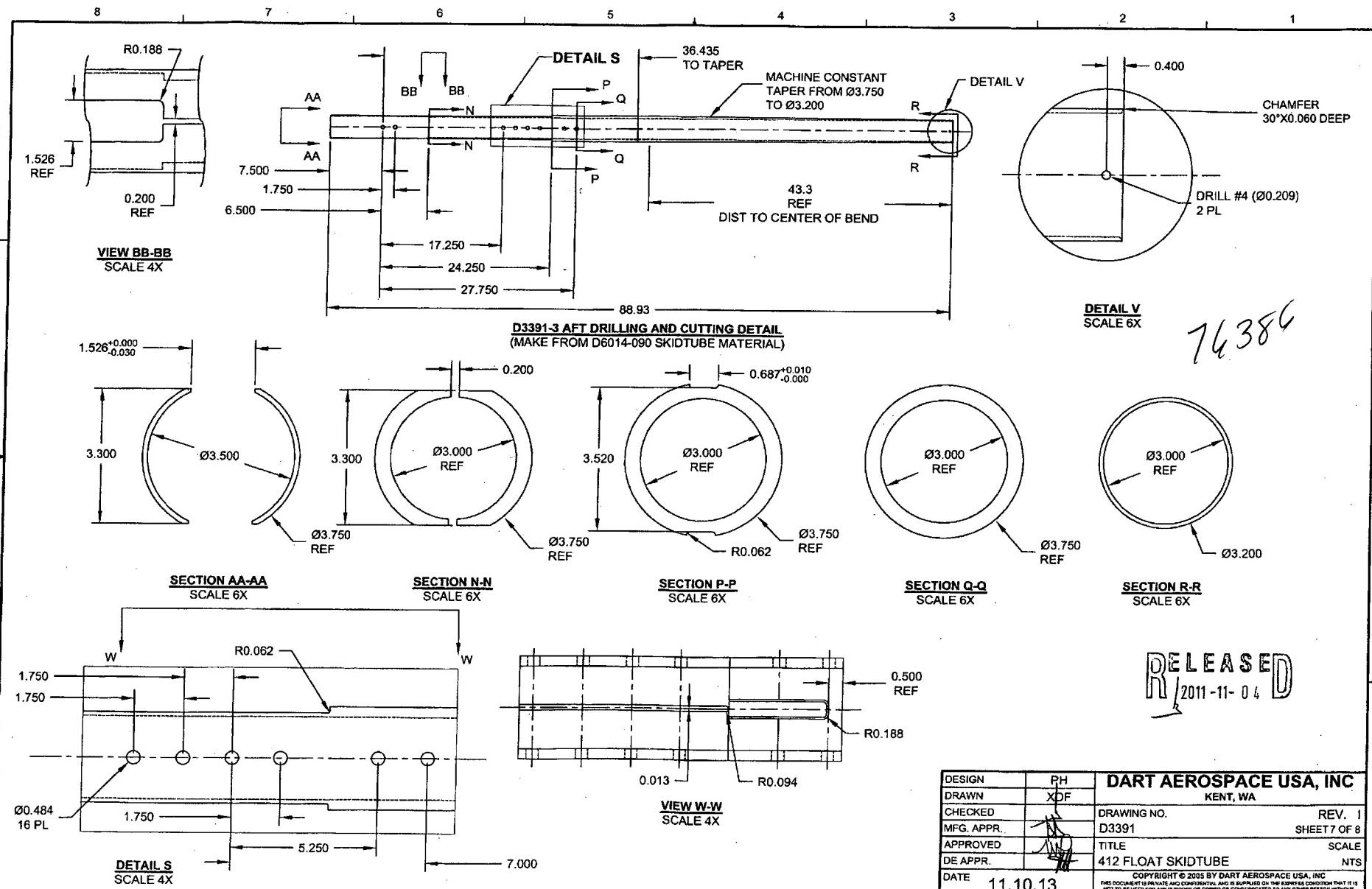






RELEASED
2011-11-04





RELEASED
2011-11-04

DESIGN	PH	DART AEROSPACE USA, INC		
DRAWN	XDF	KENT, WA		
CHECKED		DRAWING NO.	REV. 1	
MFG. APPR.		D3391	SHEET 7 OF 8	
APPROVED		TITLE	SCALE	
DE APPR.		412 FLOAT SKIDTUBE	NTSB	
DATE	11.10.13	COPYRIGHT © 2005 BY DART AEROSPACE USA, INC		
THIS DOCUMENT IS THE PROPERTY OF DART AEROSPACE USA, INC. IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT THE EXPRESS WRITTEN CONSENT OF DART AEROSPACE USA, INC.				

